

Attorney's Docket No.: 06618/692001 / CIT-3277

2. A device as in claim 1, further comprising a pump laser, optically pumping said cladding layer.

A² Sub B17
3. (Amended) A device as in claim 2 wherein said cladding layer is an erbium doped portion of material.

4. (Amended) A device as in claim 2 wherein an effective path length of the pumping is based on an optical path length that is increased by the amplification.

Sub B17
5. (Amended) A device as in claim 1 wherein said optically active portion is made of semiconductor material.

6. (Amended) A device as in claim 5 wherein said semiconductor material is one of silicon or gallium arsenide.

7. (Amended) A device as in claim 1 wherein said pumping laser pumps the cladding layer to produce spontaneous emission from the core.

8. (Amended) A method of amplifying light, comprising:
introducing light into an optical disk shaped resonator;
and

Attorney's Docket No.: 06618/692001 / CIT-3277

K2

amplifying the light in the optical disk shaped resonator.

9. A method as in claim 8 wherein said amplifying comprises amplifying the light until spontaneous emission is caused.

K3 Sub B17

10. (Amended) A method as in claim 8 wherein said amplifying comprises using a pump laser to pump a doping in a core portion that is of the optical resonator.

K4

12. (Amended) A method as in claim 8 wherein said optical resonator includes a core and a clad and said resonator has an optically active layer which uses silicon as its optically active layer.

K5

16. (Amended) A laser comprising an optical disk shaped resonator, formed of an inner active core material surrounded by an active clad material, and a pump laser which drives said active clad material until said optical resonator spontaneously emits light.